

## REMARKS

Prior to entry of this amendment, Claims 1-30 were pending in the application. In this amendment, no claims are added and no claims are canceled. Hence, Claims 1-30 are presently pending in this application.

### REJECTIONS BASED ON PRIOR ART

#### Ferrel in view of Beattie—35 U.S.C. §103(a)

The Office Action rejected Claims 1-10 under 35 U.S.C. §103(a) as allegedly unpatentable over Ferrel et al. (“*Ferrel*”; U.S. Patent No. 5,907,837) in view of Beattie et al. (“*Beattie*”; U.S. Patent No. 6,256,627). The rejection is traversed.

#### (I) Claims 1 and 8-10

Independent Claims 1 and 8-10 are amended to clarify the following, which are not disclosed or suggested in the cited references:

(a) the query contains a “concept”, which specifies a term from an enterprise specific vocabulary;

(b) wherein concepts and information types are each associated with groupings according to which information chunks are organized;

(c) a first cache is searched for information (“chunk”) proxies, rather than the information chunks themselves; and

(d) information chunks are retrieved from a second cache that is different than the first cache, based on pointers associated with corresponding proxies in the first cache.

First, the overall context of the subject matter claimed should be considered.

Claims 1 and 8-10 are directed to dynamically generating an electronic document based

on an enterprise-specific vocabulary, where specification of terms from that enterprise-specific vocabulary (i.e., “concepts”), and associated types of information, are used to query and retrieve the information chunks that constitute the content of the dynamically generated document. The rejection of Claim 1 appears to ignore this specific context of the claimed subject matter by not addressing the enterprise-specific vocabulary and the use of “concepts” to specify terms from such a vocabulary. The Background section and Sections 1.0 and 2.0 of the Specification address this idea of an enterprise-specific vocabulary.

In contrast, none of the cited references appear to disclose subject matter in the context of an enterprise-specific vocabulary, as described in the Specification. The Office Action relies on *Beattie* for a teaching of an enterprise-specific vocabulary. However, *Beattie* simply refers to a search engine indexing documents based on words, texts, strings, values and other variables that occur within a document (col. 5, lines 55-58). This is not a teaching related to enterprise-specific vocabularies or dynamically generating an electronic document based on an enterprise-specific vocabulary. Furthermore, *Beattie* does not address use of a “concept” in a query (or anything similar) to specify a term from such a vocabulary, such as particular terms used within an enterprise in reference to products, services, versions, and the like, that are a subject of the business of an enterprise. For this reason alone, i.e., that none of the cited references disclose or suggest any subject matter in the context of an enterprise-specific vocabulary, Claims 1 and 8-10 are patentable over any combination of the cited references of record.

Due to the length of the present Specification, a review of an example disclosed in the specification in reference to FIG. 12 should assist in focusing on and understanding the embodiments recited in respective Claims 1 and 8-10. Furthermore, distinctions in relation to the cited references are highlighted in this review, in the context in which the distinctions exist.

FIG. 12 depicts an arrangement that facilitates rapid retrieval of information objects from a cache, using an indexing method that is optimized for use with hierarchical trees of information objects, and n-ary relationships among such objects. An efficient way of traveling through the nodes of a hierarchical tree of information is provided, by carrying out a lookup and then caching the result set. By contrast, in prior approaches a database table lookup returns a result set of rows, and those rows and their associated column values are cached “as is.” In the claimed approach, only the index values of result set rows are cached, i.e., the information chunk proxies rather than the information chunks themselves. Since the proxies are numeric, the amount of memory needed to cache result sets is greatly reduced by omitting large or complex column values that are associated with rows in the result sets. Thus, minimum memory usage and rapid retrieval are achieved.

For example, a received query might encapsulate the request, “Show me an electronic document that describes the Features & Benefits of Product 7500.” This example query involves three pieces of data: the category Product; the concept “7500”; and the information type “Features & Benefits.” The desired result of the query is an information object, e.g., one or more information chunks, of type “Features & Benefits” that matches the concept “7500” and the Product category.

Therefore, cached content 1214 (e.g., the first cache of Claim 1) provides basic cached storage of vocabulary information relating to information objects that may satisfy the client request. In one embodiment, cached content 1214 is structured as a flat table having a plurality of rows. Each row has column values that comprise a row identifier, a concept value, an information type value, and an index pointer value. In one embodiment, the index pointer values reference specific information objects among a plurality of stored content chunks 1216, which are organized according to the hierarchical tree structure.

Stored content chunks 1216 (e.g., the second cache of Claim 1) serve as a local cache for information objects that are persistently stored in object repository 1220. Stored content chunks 1216 may be stored in a file system, database, etc.

The query cache of *Ferrel* is not the same as the “first cache of information chunk proxies” recited in Claim 1 because the query cache does not store the same type of information. The query cache of *Ferrel* stores GUIDs of designer defined search objects for retrieving stories (Abstract) by defining a specific query for corresponding content (col. 7, lines 25-47). Specific content-based queries are not stored or cached in the embodiments recited in Claims 1 and 8-10. Significantly, the query cache of *Ferrel* also stores results of the query (col. 28, line 33), which presumably include the actual matching content. In contrast, the first cache of Claim 1 stores content proxies, which include a pointer reference to the actual content (i.e., information chunks) that satisfies the query and which is stored in a different second cache. Consequently, the layering of caches involved in the embodiments recited in Claims 1 and 8-10 (i.e., the first cache and

the second cache) provide an efficient method for dynamically generating an electronic document based on an enterprise-specific vocabulary.

The Office Action appears to rely on the query log of *Beattie* for the use of the information chunk proxies indexing scheme and associated pointers to the actual information chunks. However, the query log of *Beattie* stores a query and its associated search results and accessed documents (col. 11, lines 49-51). Thus, the query log of *Beattie* does not teach and has no use for pointers because the search results and documents are apparently stored right there in the log. Further, the query log of *Beattie* is not the same as the “first cache of information chunk proxies” recited in Claim 1, which stores concept and information type values that are specific to the enterprise vocabulary, because the query log of *Beattie* stores a query and its associated search results and accessed documents, none of which are disclosed in *Beattie* specifically as concept and information type values that are specific to the enterprise vocabulary. It is overarching beyond the standard required of rejections under 35 U.S.C. §103 to equate a query and associated search results and documents with specific enterprise vocabulary values that represent groupings according to which information chunks are organized.

Further, in the Response to Arguments, the Office Action contends that *Ferrel* mentions pointers at col. 22, lines 29-37. However, *Ferrel* describes pointers in the context of a parse tree for tagged elements, not in the context of cached indices that include pointers to cached information chunks from which an electronic document is dynamically generated.

All of the foregoing distinctions between the cited references of record and the subject matter recited in independent Claims 1 and 8-10 show that the cited references

would not have made the subject matter of these claims obvious to one skilled in the art at the time of the invention. This is because, for one reason, the cited references collectively do not teach, disclose or suggest each and every feature recited in these claims. Withdrawal of the rejection of independent Claims 1 and 8-10 is kindly requested.

Further, it is well-settled that “[i]t is impermissible to use the claimed invention as an instruction manual or ‘template’ to piece together the teachings of the prior art so that the claimed invention is rendered obvious” and that “[o]ne cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.” *In re Fritch*, 972 F.2d 1260, 23 USPQ 2d 1780, 1784 (Fed. Cir. 1992); quoting *In re Fine*, 837 F.2d 1071, 1075, 5 USPQ 2d 1596, 1600 (Fed. Cir. 1988). It appears that the claimed invention is being used as a template to piece together independent and incoherent alleged “mentions” of various portions of the claim language in order to formulate an obviousness rejection of Claims 1 and 8-10, which has been held impermissible.

(II) Claims 2-7, 15, 20, 25 and 30

Each of Claims 2-7, 15, 20, 25 and 30 depends, directly or indirectly, from one of Claims 1 and 8-10. Therefore, each of Claims 2-7, 15, 20, 25 and 30 is patentable over the references of record for at least the same reasons as the claim from which each respectively depends. Withdrawal of the rejection of independent Claims 2-7, 15, 20, 25 and 30 is also requested.

Further with respect to Claims 6 and 7, the Office Action appears to rely on a query cache 1004 and a catalog database 1002 of *Ferrel* for a teaching of “a plurality of

... cache servers.” However, FIG. 20 of *Ferrel* clearly does not disclose a plurality of cache servers. Rather, FIG. 20 depicts (a) a database server, which typically manages persistently stored data and is not typically considered to be a cache server; (b) a query cache, which appears to be a cache of information, not a cache server for managing cached information; and (c) a catalog database, which appears to be a database of information, not a cache server for managing cached information. The point being that FIG. 20 does not disclose a plurality of cache servers. For this additional reason, Claims 6 and 7 are patentable over the references of record.

Ferrel in view of Anderson—35 U.S.C. §103(a)

The Office Action rejected Claims 11-14, 16-20, 21-24 and 26-30 under 35 U.S.C. §103(a) as allegedly unpatentable over *Ferrel* in view of Anderson et al. (“*Anderson*”; U.S. Patent No. 6,510,434).

Each of Claims 11-14, 16-20, 21-24 and 26-30 depends, directly or indirectly, from one of Claims 1 and 8-10. Therefore, each of Claims 11-14, 16-20, 21-24 and 26-30 is patentable over the references of record for at least the same reasons as the claim from which each respectively depends. Withdrawal of the rejection of independent Claims 11-14, 16-20, 21-24 and 26-30 is requested.

## CONCLUSION

For at least the reasons indicated above, all of the pending claims (1-30) present patentable subject matter over the references of record, and are in condition for allowance. Therefore, Applicants respectfully request issuance of a timely Notice of

Allowance in this case. If the Examiner has questions regarding this case, the Examiner is invited to contact Applicant's undersigned representative.

To the extent necessary, a petition for an extension of time under 37 C.F.R. §1.136 is hereby made. Please charge any shortages in fees due in connection with the filing of this paper, including extension of time fees, or credit any overages to Deposit Account No. 50-1302.

Respectfully Submitted,

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on 7/14/05 by Davei Varamoto